

1935 **CIRCUITRY (Constant Resistance Capacity Stand-Off Circuit)** A D Blumlein (UK)

Figures 11.9(a) and (b) show two versions of the basis of this invention, namely two-terminal arrangements of an inductor L , a capacitor C , and two equal resistors R having the property that the impedance measured between the two terminals is purely resistive, of value R at all frequencies, provided $L/C = R^2$. This property was known, but Blumlein adapted the circuit (particularly figure 11.9(b)) as a means of removing from critical points in a circuit (e.g. a wide-band amplifier) the stray capacity to earth of, for example, floating power supplies. The example shown in figure 11.9(c) is the application of the idea to the filament supply for the cathode follower output valve of the vision modulator for the original Alexandra Palace transmitter. The 'hardware' of this is preserved in the Science Museum.

SOURCE: 'The work of Alan Blumlein' *British Kinematography Sound and Television* vol 50, No 7, p 209 (July 1968)

SEE ALSO: British Patent Specification No 462 530 (1935)

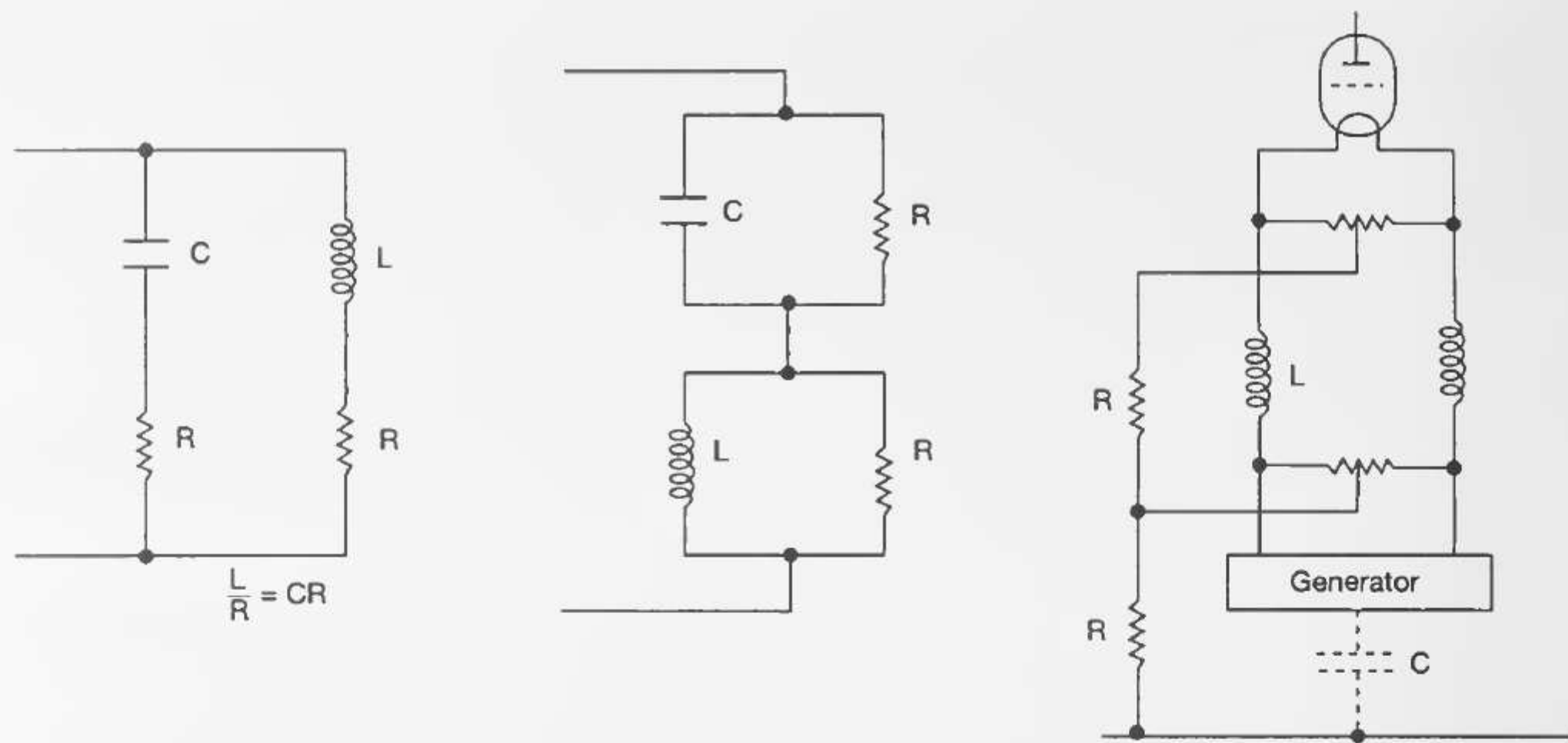


Figure 11.9. Constant resistance capacity stand-off circuit.